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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,338	10/28/2003	John R. Bucknell	706690US1	5599

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EXAMINER	
TRIEU, THAI BA	
ART UNIT	PAPER NUMBER
3748	

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/695,338	Applicant(s) BUCKNELL ET AL.	
	Examiner Thai-Ba Trieu	Art Unit 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/28/2003</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “**electronic controller**” (See Claim 4) and “**processor**” (See Claim 5) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

- On page 9, line 10, "***catalyst 50***" should be replaced by -- ***catalyst 60*** – (for correcting typo error).

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 3 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically,

- In line 1, the recitation of "can be positioned" renders the claims indefinite, since it is not clear that under which condition that the valve can be positioned to completely block the exhaust gas inlets on start-up to direct exhaust gas to heat a catalytic converter, and under which condition that the valve cannot be positioned to completely block the exhaust gas inlets on start-up to direct exhaust gas to heat a catalytic converter. Applicants are required to identify each condition.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Koike (Patent Number 4,389,845).

Koike discloses an exhaust gas turbocharger mounted on a gasoline fueled engine, said exhaust gas turbocharger comprising:

a twin scroll turbine housing (13a, 13b, and 15) (See Figures 10-11);

a turbine wheel (8) positioned in said twin scroll housing (See Figures 4-5, and 9);

exhaust gas inlets (3a, 3b), operatively connected to port exhaust gas through each side of said twin scroll turbine housing and onto said turbine wheel (See Figures 5 and 8);

a bypass (via line to 20) , operatively connected to port exhaust gas around said exhaust gas inlets (3a, 3b) to bypass said turbine wheel (See Figure 11);

a valve (16), operatively positioned to control exhaust gas flow to said exhaust gas inlets and said bypass (via line to 20);

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-3 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koike (Patent Number 4,389,845), in view of Deacon (Patent Number 6,543,228 B2).

Koike discloses the invention as recited in the rejection of claim 1; however, Koike fails to disclose the valve being a barrel valve, and blocked the exhaust gas inlets on start-up to direct exhaust gas to heat a catalytic converter.

Deacon teaches that it is conventional in the turbocharged internal combustion engine art, to utilize a barrel valve (40) and blocked the exhaust gas inlets on start-up to direct exhaust gas to heat a catalytic converter (not shown) (See Figures 9-10, Column 3, lines 63-67, Column 4, lines 65-67, Column 5, lines 1-12, Column 6, lines 59-67, and Column 7, lines 1-12 and 44-51).

It would have been obvious to one having ordinary skill in the art at that time the invention was made, to have utilized the valve being a barrel valve, and blocked the exhaust gas inlets on start-up to direct exhaust gas to heat a catalytic converter, as taught by Deacon, to improve the efficiency and reduce emissions, in the Koike device.

Claims 4-5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koike (Patent Number 4,389,845), in view of Hashimoto et al. (Patent Number 4,982,567).

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Koike discloses the invention as recited in the rejection of claim 1, and further discloses a control unit (17, 22) operationally coupled to position said valve; however, Koike fails to disclose a processor and an electronic controller.

Hashimoto teaches that it is conventional in the turbocharged internal combustion engine art, to utilize a processor (71) configured to position said valve; and an electronic controller (71) operationally coupled to position said valve (See Figure 2).

It would have been obvious to one having ordinary skill in the art at that time the invention was made, to have utilized a processor and an electronic controller, as taught by Hashimoto, to improve the accuracy of controlling the valve in the Koike device.

Conclusion

The IDS (PTO-1449) filed on October 28, 2003 has been considered. An initialized copy is attached hereto.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Frankenstein et al. (Pub. Number US 2004/0244373 A1) disclose a controlled turbocharger with an integrated bypass.
- Tadokoro et al. (US Patent Number 4,617,799) disclose a plural turbine inlet passage turbo-supercharger with an inlet passage shut-off valve.
- Tadokoro et al. (US Patent Number 4,745,753) disclose an engine turbo-supercharger control.
- Benson (US Patent Number 5,673,559) discloses a turbine housing system.


- Roby et al. (Patent Number 6,263,672 B1) discloses a turbocharger with a restrictor valve including a barrel-shaped semi-cylindrical flow-restricting device.
- Inaba (Patent Number JP 05-209530 A) discloses air turbine device of an engine.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai-Ba Trieu whose telephone number is (571) 272-4867. The examiner can normally be reached on Monday - Thursday (6:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTB
December 29, 2004


Thai-Ba Trieu
Primary Examiner
Art Unit 3748